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0,/		Altschul et al., "Gapped BLAST and PSI_BLAST: A New Generation of Protein Database Search
	C2	Altschul et al., "Gapped BLAST and FSI_DAST. 1997)
i		Programs," Nucleic Acids Research 25(17):3389-3402 (1997)
1		·
1		Begley et al., "A Conserved Motif within the Vitamin K-dependent Carboxylase Gene is Widely
	C3	Begley et al., "A Conserved Motif within the Vitamin K-dependent Garbosystes Distributed Across Animal Phyla," Journal of Biological Chemistry 275 (46):36245-36249 (November
		Distributed Across Animal Phyla, Journal of Biological Chemistry 273 (45):552.15
ł		17, 2000)
1	1	
	C4	Bruce, D., Mundt, Mundt, M. et al., Homo Sapiens Chromosome 16 Clone 449J19. 06-May-1999
	1	GenBank Accession No. AC007499
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	C5	Bruce et al., (1999), "Homo Sapiens Chromosome 16 Clone RPII-165M2", EBI Database Accession
	00	No. AC007335 XP 002222742
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	1	A LA MILL OF CORP. INC.
	C6	Chanda (ed.), Current Protocols in Molecular Biology, 2000, Volume 4, John Wiley & Sons, Inc.
	, CO	(Table of Contents only)
		(Table of Comments of Comment
	C7	Grifman et al., "Functional Redundancy of Acetylcholinesterase and Neuroligin in Mammalian
	101	Neuritogenesis," Proc. Natl. Acad. Sci, USA 95:13935-13940 (November 1998)
		Neuritogorioani,
 		Hashimoto et al, (2001), "Macaca Fasciculris Brain cDNA Clone: QtrA-12316", EBI Database
1	100	Accession No. AB060873 XP 00222744
	- 1	Accession No. Aboost 7 % College
		Hillier et al., WashU-NIC Human EST Project. Similar to Carboxylesterase Precursor. EMBL
] [C9	Accession No. AA 608798. March 2, 1998. Alignment with SEQ ID NO:2
	-	Accession No. An obor 50. Maior = 1
		International Human Genome Sequencing Consortium, "Initial Sequencing and Analysis of the
	C10	Human Genome," Nature 409:860-921 (February 15, 2001)
		Human Genome, Wature 403.000-021 (1 35132)
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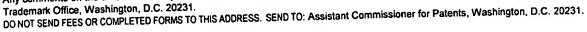
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itials*	No. ¹	Isogai et al. (2001), "Homo Sapiens cDNA FLJ31547 fis, clone NT2RI2001010", EBI Database	
\$5	·	Accession No. AK056109 XP 002222143	
	C12	Karlin et al., "Applications and Statistics for Multiple High-Scoring Segments in Molecular Sequences," <i>Proc. Natl. Acad. Sci.</i> 90:5873-5877 (June 1993)	
\dagger	C13	Karlin et al., "Methods for Assessing the Statistical Significance of Molecular Sequence Features by using General Scoring Schemes," Proc. Natl. Acad. Sci. 87:2264-2268 (March 1990)	
+	C14	Myers et al., "Optimal Alignments in Linear Space," CABIOS 4(1);11-17 (1998)	
	C15	National Institutes of Health (2001), "603039938F1 NIH_MGC_115 Homo Sapiens cDNA Clone IMAGE: 5181056 5' mRNA Sequence", EBI Database Accession No.I BI 822069 XP 002222745	
+	C16	Old and Primrose, "Nucleic Acid Hybridization Methods. In: Principles of Gene Manipulation," Blackwell Sci Pubs., Boston, (1985), 117-120	+
+	C17	PCT Foreign Search Report (November 12, 2002)	+
	C18	Satoh et al., "Molecular Aspects of Carboxylesterase Isoforms in Comparison with Other Esterases," Toxicology Letters 82/83:439-445 (1995)	+
	C19	Sambrook et al. (eds.), "Molecular Cloning – A Laboratory Manual," 1989, 2 nd Edition, Cold Spring Harbor Laboratory Press (Table of Contents only)	+
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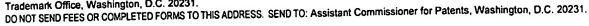
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	C20	Silver et al., "No. 606361e1 Carboxylesterase Nucleic Acid: Molecules, Proteins and Uses Thereof," US 6,063,610 SEQ ID NO:10. May 16, 2000 (FD December 12, 1996). Alignment with SEQ ID NO:2
	C21	Sone et al. (1998), "Carboxylesterase Precursor (EC 3.1.1.1)", EBI Database Accession No. 035533 XP 002222746
	C22	Sonnhammer et al., "Pfam: A Comprehensive Database of Protein Domain Families Based on Seed Alignments," <i>Proteins</i> 28:405–420 (1997)
	C23	Tsukamoto , T., Toyama, R. et al.,"Human Guanine Nucleotide-binding Regulatory Protein (Go-Alpha) Gene, Exons 1 and 2". 08-Nov-1994 GeneBank Accession No. M60156
	C24	Tsukamoto , T., Toyama, R. et al., "Structure of the Human Gene and Two Rat cDNAs Encoding the Alpha Chain of GTP-Binding Regulatory Protein Go: Two Different mRNAs are Generated by Alternative Splicing," <i>Proc. Natl. Acad. Sci USA 88(8)</i> :2974-2978 (April 15, 1991)
	C25	Venter et al., "The Sequence of the Human Genome," Science 291:1304-1351 (February 16, 2001)
	C26	Walker et al., "On a Potential Global Role for Vitamin K-dependent γ-Carboxylation in Animal Systems," Journal of Biological Chemistry 276(11):7769-7774 (March 16, 2001)
	C27	Weintraub et al., "Anti-sense RNA as a Molecular Tool for Genetic Analysis," Trends in Genetics (1985)
	C28	GenBank Accession No. L05493 (August 4, 1993)

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